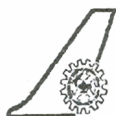


DOCUMENTATION SHEET



**NATIONAL
AEROSPACE
LABORATORIES**

Class : Restricted

No. of Copies : 3

Title : Developmental studies on High temperature bis-maleimide resin Composites

Author / s : A. Vanaja, RMVGK Rao

Division : FRP Division

NAL Project No. : ----

Document No. : PDRP 0315

Date of Issue : June 2003

Contents	1	Pages	24	Figures	12	Tables	4	Annexures: ---
-----------------	---	--------------	----	----------------	----	---------------	---	-----------------------

External Participation : Nil

Sponsor :

Approval : Head, FRP Division

Remarks : ---

Keywords: Bis-maleimide, composites, Tg, DSC,

Abstract:

This report presents the developmental studies on high Tg bismale-imide resin systems for high temperature applications. Epoxy novolacs (EPN) are a special class of resins belonging to the epoxy resin family showing medium to high functionality. The only limitations of these resins are their glass transition temperature. The Tg of these resins can be improved by blending them with bismale-imide. With this background investigations were carried out to modify an EPN with bismale-imide for high performance applications.

The main objectives of this studies are

Synthesis three different types of bismile-imide, modification of EPN resin with these bismile-imide and to evaluate these formulation for high performance applications.

This document summarized the Ph.D work carried out by Ms Vanaja, and her thesis has been submitted for evaluation on 5th June 2003 to the Bangalore University.